

## ABSTRACT OF THE DISCLOSURE

The present invention relates to a novel cell co-culture system and methods of using the same for studying cellular interactions. The co-culture system comprises a cell culture container partitioned into multiple compartments by removable partition units/separating walls. Different cell types or materials can be placed and cultured in the various compartments. When the cells are ready for cell interaction studies, the removable walls separating two adjacent compartments are removed and cellular interaction can then be studied in a defined area, i.e. the area previously occupied by the bottom edges of the removable walls. The present invention thus provides a cell co-culture system that would set up a new and flexible platform for most cell interaction studies.